

ABSTRACT OF THE INVENTION

A pair of compact, energy-efficient, intelligent, wireless transceiver units are designed to replace the cable that interconnects a portable bar-code scanner, keyboard, and display or other host to a portable bar-code printer or the like. When reset, the units exchange linkage packets and thereby exchange addresses. Thereafter, the two units communicate in an error-free fashion with each other, even in the presence of noise and interference, by exchanging addressed packets containing error detection information. Alternate transmission frequencies are selected when transmissions cannot be received at one frequency. The host unit may maintain independent linkages with multiple printers or the like, with a switch on the host unit selecting the desired printer. Power usage is minimized by shutting down transmitters, receivers, serial port drivers, and microprocessors whenever possible, and for extended periods when data is not being transmitted.

09740351-110900